

ABSTRACT

An image processing apparatus is provided for accurately recognizing an edge direction to perform an accurate image interpolation. A direction determining unit recognizes an edge direction of a remarked pixel and outputs it with information on its position to a reliability ranking unit and a directional distribution generating unit. A direction interpolating unit interpolates the remarked pixel in terms of directional interpolation. The reliability ranking unit determines whether or not a interpolated pixel is properly interpolated by the direction interpolating unit, ranks its reliability, and outputs a result to a directional distribution generating unit. This directional distribution generating unit generates directional distribution based on directional information and reliability information. A direction selecting unit recognizes an edge direction based on the directional distribution generated by the directional distribution generating unit.